

Appl. No. 09/684,488
Amdt. dated July 12, 2004
Reply to Office action of May 17, 2004

Amendments to the Specification:

Please replace the paragraph beginning at page 14, line 14 with the following amended paragraph:

The index i is utilized to represent the partition to which a data point x currently belongs or is a member of, and the index j is utilized to represent the partition that is currently being evaluated for a potential move to which the data point x can be moved. This embodiment of the present invention provides the following predetermined metric for evaluating whether a set of data points should be moved from the current partition to a proposed or potential partition:

$$\frac{n_i}{n_i - |U|} |m_u - m_i|^2 - \frac{n_i}{n_j + |U|} |m_u - m_j|^2$$

where U is the subset of data points (U is a subset of S_i) being evaluated for the move, $|U|$ is the size of U that is specified by the size parameter, m_u is the geometric center of U , m_i and m_j are the centers of the clusters and n_i and n_j are the counts of the clusters.